

SOME COMMENTS ON WALCKENAER'S NAMES OF  
AMERICAN SPIDERS,  
BASED ON ABBOT'S DRAWINGS<sup>1</sup>

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In 1887 McCook rediscovered the Abbot drawings, basis of many of Walckenaer's spider descriptions, and initiated a controversy in spider nomenclature by synonymizing spider names then in use. Emerton replied that the drawings represent the spiders in so general and indefinite a way that identification would only increase the uncertainty of nomenclature. Banks' comments about the Walckenaer descriptions were blunt: "They rank with 'hearsay evidence.' I shall not use them nor list them; I shall ignore them." Later Gertsch (1933) expressed the fear that these names would be revived and cause permanent instability: "The problem at hand is not the question of validity, which should be unchallenged, but one of recognition." In 1944 Chamberlin and Ivie made a serious attempt to establish the Walckenaer names *en masse*. Their synonymics were accepted by Archer (1946, 1950), Levi (1954), and Levi and Field (1954), but not by Gertsch (1953). We were at first inclined to follow Chamberlin and Ivie in using the Walckenaer names, but during the course of the theridiid studies, had an opportunity to examine the Abbot drawings. We are convinced that in the Theridiidae at least, Chamberlin and Ivie were ill-advised to attempt the synonymies, and, indeed, that establishment of such synonymies would be a disservice to araneology.

English-born John Abbot immigrated in 1776, as a young man, to Screven County, Georgia, and lived in Georgia for 65 years as a schoolmaster and naturalist. He painted birds, butterflies and other animals, and his drawings were sold by John Francillan, a London silversmith (Dow, 1914). Sixteen volumes of Abbot's drawings are in the British Museum (Natural History) in London; many volumes

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are in other institutions, several at the Houghton Library of Harvard University. According to Chamberlin and Ivie (1944), Walckenaer purchased drawings from the entomologist Mackay. In the eighteen forties Walckenaer named and described some of the drawings of the 1792 Abbot volume (now in the British Museum), in *Histoire Naturelles des Insectes Aptères*. There is some doubt about the date of publication of Walckenaer's second volume. Our personal volume has two inscriptions, one of Walckenaer, addressed to Mr. Adam White and dated 4 June 1841, and another presumably in White's handwriting: "Adam White Villeneuve, St. Germ. Walckenaer's study June 7, 1841." Thus the publication date is undoubtedly 1841, not 1842 as stated by Chamberlin and Ivie and Bonnet (1945).

Dr. McCook visited the British Museum in 1887 and his attention was called to the Abbot drawings of American spiders. In a report to the Philadelphia Academy of Sciences (1888a), he discussed some of the questions raised by this discovery. McCook was much concerned about the changing of names in use, but he also wanted to credit the earliest author: "the laws of priority must be considered, and honesty and justice can give no room for considerations of convenience and sentiment." Several argiopid names of Hentz were identified with those of Walckenaer.

McCook's paper was reviewed by Emerton (1888). Emerton had looked over the Abbot drawings at the time of his visit to the British Museum in 1875, "and like Mr. McCook made hasty identifications of such few of them as I could. . . . A comparison of the numbers shows that only five of these identifications agree with those of McCook showing the uncertainty of off-hand identifications of these drawings by two persons both familiar with the common spiders of the northern states. The greater number of Abbot's drawings represent the spiders only in the most general and indefinite way and it seems to me improbable that any large number of them can ever be identified."

Included in McCook's self defense (1888b) were excerpts from a congratulatory letter from Thorell. Banks followed: "The descriptions of new species in Walckenaer's *Insectes Aptères* fall into two classes: descriptions based on specimens, and descriptions based on figures. The former class are undoubtedly valid and I intend to accept them wherever I can apply them. Descriptions of figures, however, I hold, have no claim on the naturalist. Not only are they based on figures, but the figures have never been published. Many of the descriptions are sufficient for identification, but most are not.

But no matter how complete, they are not descriptions of spiders; but of figures of spiders. They rank with 'hearsay evidence'. I shall not use them nor list them; I shall ignore them."

Chamberlin and Ivie (1944) undertook "initially to determine, as far as possible from available evidence, the proper application of the names based by Walckenaer upon Abbot's drawings of the spiders of Georgia." Chamberlin made color photographs of Abbot's drawings at the time of a London visit, and Ivie spent a month in April 1943 collecting spiders in Georgia. Some other collections were obtained during brief stops in Georgia in August 1933 and June 1935. Chamberlin and Ivie listed the collections (including many determined juveniles), and synonymized many well established spider names of many families with names of Walckenaer.

However, in our own examination of the Abbot manuscript drawings, we found that the majority do not show diagnostic characters; interpretation must be subjective, and authors may differ. For instance, McCook synonymized the name *Tetragnatha lacerta* Walckenaer with *Tetragnatha caudata* Emerton; Chamberlin and Ivie synonymized the same name with *Rhomphaea fictilium* (Hentz), of a different family. Most of McCook's synonymies concerned argiopid spiders that have a characteristic dorsal abdominal pattern. However a modern author has to consider the possibility of sympatric sibling species.

Further, and to be expected, students working with groups never revised make errors in identification. Thus Chamberlin and Ivie synonymized *Argyrodes trigonum* (Hentz) with *Linyphia rufa* Walckenaer. However, the specimens so labelled were not Hentz's species, but were *Argyrodes furcatus* (O.P.-Cambridge), a species more common in Georgia. *Tidarren fordum* (Keyserling) was synonymized with *Theridion sisyphoides* Walckenaer, but specimens so labelled were not *Tidarren fordum*. Female specimens of *Theridion alabamense* Gertsch and Archer were misidentified as *Theridion americanum* Walckenaer, and the male was described as new. Walckenaer's description of *T. americanum* does not fit *T. alabamense*. Figure 43, Walckenaer's *Theridion ansatum*, was not recognized as the species otherwise called *Tidarren sisyphoides* (Walckenaer), easily recognized by the white line on the posterior part of the abdomen. Probably half the examined theridiids of the Chamberlin and Ivie Georgia collection had incorrect identifications, and the same may be true of specimens of other families. While these errors can easily be understood, they invalidate many of the synonymies of Walckenaer's names.

Chamberlin and Ivie apparently were unaware of the earlier exchanges about the synonymies, for they neither referred to them nor listed them in their bibliography. Also they apparently did not consider the possibility of additional plates, letters and notes concerning the Abbot spiders, in other libraries. Such sources of evidence might have relevance in interpreting Abbot's drawings, which must be considered the types for the Walckenaer names.

As recently as twenty years ago, some considered the discovery of an "older name" a matter to be admired, and priority was frequently invoked to rationalize changing a name in widespread use. Today the attitude toward stability of names has changed, partly due to criticism of zoologists in fields other than taxonomy. Perplexed by the constant change of names, these other biologists leveled the charge that some taxonomists were spending more time in historical than in biological research.

Two approaches to stability of names present themselves: Some taxonomists think that through priority, the supply of older names will eventually become exhausted; at the same time, strict priority leads nomenclature back to the oldest and most uncertain names. Other taxonomists favor established usage of the name as the basis of stability, though usage may be hard to define.

The new (1961) Zoological code of Nomenclature combines the criteria of priority and usage through a statute of limitations. Also, and more important, the new code emphasizes in its Preamble the reason for its existence — to keep names stable — a reflection of the present needs of zoologists. The establishment of sweeping synonymies of the Walckenaer names based on Abbot's drawings, so inconsistent with stability, should be questioned.

A more acceptable treatment of the Walckenaer names was demonstrated by Bishop (1924), in his revision of the North American Pisauridae. By restricting himself to one family he was able to treat each nomenclatural problem individually and authoritatively, rather than all in one arbitrary sweep. The largest number of specimens, the greatest grasp of the literature, and the keenest understanding of the particular spider group were brought into each judgement.

Our purpose, then, is to urge that spider students adopt the Walckenaer synonymies proposed by Chamberlin and Ivie only after thorough study of the spider genera in question, including, in addition to a study of the Abbot drawings, investigation of usage of names, species problems, and distributions, giving due consideration to the basic principles of nomenclature: to stability and universality of names.

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